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at 42°C for 60 seconds. After the reaction mixture was left on ice for 2 minutes, 0.9 ml of the SOC medium (Toyobo Co., Ltd.) was added and the cells were shake-cultured at 37°C for one hour. The culture was centrifuged at 5,000 rpm for one minute and the supernatant was discarded. The sedimented competent cells were suspended in the solution remaining in the centrifugation tube, and applied to two ampicillin LB plates containing 100 μ g/ml ampicillin at a ratio of 1 : 10. The cells were cultivated overnight at 37°C and, from plasmids obtained from the resulting colonies, those with inserted DNA of the His secretory signal were selected by PCR and designated as pTrypHis.

IN THE CLAIMS

Please amend claim 3 as follows:

3. (Amended) The protein expression vector according to claim 1, wherein the cloning site or the nucleotide sequence encoding the target protein is present successively at the 3' end of the cleavable nucleotide sequence.

Please amend claim 4 as follows:

4. (Amended) The protein expression vector according to claim 1, wherein a nucleotide sequence encoding at least one amino acid is contained as a spacer nucleotide



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sequence in the 3' downstream side of the secretory signal nucleotide sequence, but in the 5' upstream side of the cleavable nucleotide sequence.

Please amend claim 6 as follows:

6. (Amended) The protein expression vector according to claim 4, wherein the spacer nucleotide sequence is composed of at least a cleavable nucleotide sequence.

Please amend claim 7 as follows:

7. (Amended) The protein expression vector according to claim 1, wherein the cleavable nucleotide sequence, when translated into an amino acid sequence, is cleaved by an enzyme at immediate upstream and/or immediate downstream and/or in the middle of said amino acid sequence.

Please amend claim 9 as follows:

9. (Amended) The protein expression vector according to claim 7, wherein the enzyme is enterokinase.

Please amend claim 10 as follows:

10. (Amended) The protein expression vector according to claim 1, wherein the secretory signal nucleotide sequence is an IgG (κ) signal or a trypsin signal.

Please amend claim 11 as follows:



...

11. (Amended) The protein expression vector according to claim 1, wherein the Tag nucleotide sequence is polyhistidine.

Please amend claim 12 as follows:

12. (Amended) The protein expression vector according to claim 1, further comprising a nucleotide sequence encoding an antibody recognition epitope.

Please amend claim 13 as follows:

13. (Amended) The protein expression vector according to claim 1, wherein the nucleotide sequence encoding the target protein is that encoding neurosin.

Please amend claim 14 as follows:

14. (Amended) Host cells transformed with the protein expression vector according to claim 1.

Please amend claim 18 as follows:



18. (Amended) A process for producing a target protein which comprises using the protein expression vector according to claim 1.

Please amend claim 20 as follows:



20. (Amended) A process for producing a recombinant fusion protein comprising an amino acid sequence of a target

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protein which comprises using the protein expression vector or the host cells according to claim 1.

Please amend claim 22 as follows:

22. (Amended) A process for producing a target protein which comprises retaining the recombinant fusion protein according to claim 21 with a substance capable of recognizing at least one of Tag and an epitope in said recombinant fusion protein, liberating the recombinant fusion protein from the substance to purify it, and releasing the target protein by reacting said purified recombinant fusion protein with an enzyme capable of recognizing the cleavable site within said recombinant fusion protein, followed by collecting the released target protein.

Please amend claim 23 as follows:

23. (Amended) A process for producing a target protein, which comprises retaining the recombinant fusion protein according to claim 21 with a substance capable of recognizing at least one of Tag and an epitope in said recombinant fusion protein, and releasing the target protein by reacting said purified recombinant fusion protein with an enzyme capable of recognizing the cleavable site within said recombinant fusion protein, followed by collecting the released target protein.

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Please amend claim 24 as follows:

24. (Amended) A target protein is obtained by the process according to claim 22.

Please enter the following new claims:

- 25. (New) A process for producing a target protein comprising cultivating host cells according to claim 14.
- 26. (New) A target protein obtained by the process according to claim 25.
- 27. (New) A process for producing a recombinant fusion protein comprising an amino acid sequence of a target protein which comprises cultivating the host cells according to claim 1.
- 28. (New) A recombinant fusion protein comprising the amino acid sequence of the target protein obtained by the process according to claim 27.
- 29. (New) A target protein which is obtained by the process according to claim 23.